

The impact of patient complaints and compliments on medical performance: a systematic review

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Abstract

Background:

Patient complaints and compliments are considered integral to patient safety and quality of care. This review therefore sought to explore the impact of patient complaints and compliments on the medical performance of individual doctors.

Method:

Database searches were performed in PubMed, PsycInfo, EMBASE, Medline, CINAHL, and the Cochrane Library for peer-reviewed publications published in the English language between 2007-2017. Data was thematically analysed and synthesised using a modified narrative approach. Impact was assessed using Barr's (2000) adaptation of Kirkpatrick's evaluation model.

Results:

Of the 355 articles retrieved, six were included. One identified a change in measured performance (Kirkpatrick level 3b). Five identified a self-reported change (Kirkpatrick level 3a) in performance or behaviour. No articles identified a change in the health and wellbeing of patients (Kirkpatrick level 4). Improved patient relations, more thorough documentation, enhanced referral, prescription and testing requests were identified as positive impacts, although such changes may also be detrimental. Other detrimental impacts identified included a break down in patient relations, increased defensive practise, early retirement, and altered physical or mental wellbeing. Personal, procedural and cultural factors appeared influential. No articles examining the impact of compliments were identified.

Conclusion:

Patient complaints can have an impact on medical performance. These can be both positive and negative. The intended purpose of complaints may be undermined by personal, procedural and cultural factors. The fear, language and stigmatisation of complaints should be addressed and the recognition of compliments more actively encouraged. Review findings have implications for those involved in designing and supporting complaint and compliment processes.

Background

Patient complaints and compliments are identified as a valuable resource for monitoring patient safety and quality of care.(1-4) Such data often provides unique insight into systemic issues not typically identified through traditional systems of healthcare monitoring or person-centred care.(2) Although large amounts of research has explored the frequency, categorisation and source of complaints at an organisational level, limited attention has been paid to the impact of patient complaints on the medical performance of individual doctors.

On an international scale, the systematic collection, analysis and reporting of patient complaints is increasing.(2, 5-7) Such processes can be seen in Australia, Canada, New Zealand, Norway, the United States (US), and United Kingdom (UK).(1, 5, 6, 8) In line with wider societal trends of transparency and social accountability,(9) patients typically make a complaint for preventative as opposed to punitive purposes, i.e. “patients want their complaint to make a difference to help prevent others suffering in the future.”(p.19)(10) As such, motivations for submitting a complaint are often based on a desire for quality improvement and patient safety.(2, 11)

Linked to this improvement agenda is the increasing inclusion of complaints and compliments in regulatory processes on an international scale.(12, 13) For example, medical revalidation, the UK’s regulatory process designed to ensure all doctors licensed to practice “are both up to date and fit to practise”(14), requires licensed doctors to collect and reflect upon a portfolio of supporting information including patient complaints and compliments.(14, 15) As noted by Nash et al., the regulation of the medical profession requires the establishment of effective complaint mechanisms and procedures.(6) However, while some research has explored the psychological impact of receiving a complaint,(1, 6)·(16-18) limited research has explored the potential impact of receiving a complaint or compliment on medical performance. Despite this lack of evidence, the current assumption underpinning regulatory developments such as revalidation, seems to be that engaging with and reflecting upon patient complaints improves doctor performance. To date, this assumption has not yet been fully explored.

An accurate understanding of how patient complaints and compliments influence, if at all, the medical performance of individual doctors and subsequent experiences of healthcare and person centred care is therefore imperative.(6) This review therefore aims to explore what impact patient complaints and compliments have, if at all, on the medical performance of individual doctors.

Methods:

Data sources

This systematic review was conducted in line with the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA),(19) and Centre for Reviews and Dissemination guidance.(20)

As advised by an information specialist, one author searched six databases (PubMed, PsycInfo, Medline, EMBASE, CINAHL, and the Cochrane Library) for peer-reviewed literature published between 2007-2017.

Electronic database searches were supplemented with citation and reference list searches of eligible studies.

Study Selection

Search strategy

Search terms listed in Table 1 were designed by research team members using the Peer Review of Electronic Search Strategies (PRESS) guidance.(21) Included search terms used a combination of truncated key words and synonyms to ensure sensitivity and specificity.

[Table 1 here]

Study inclusion

Articles were included if they were: peer-reviewed publications excluding commentaries, opinion pieces, editorials, or letters; published in the English language between 2007-2017; and discussed the impact of patient complaints and/or compliments on the medical performance of qualified doctors.

Articles not in the English language were excluded as the reviewers could not provide an accurate translation. The date parameters used were designed to ensure only the most contemporary information was included.

Where the analysis of patient complaints formed part of a more comprehensive learning intervention, the article was only included if the impact of complaints and/or compliments could be disaggregated. Where articles discussed the influence of other improvement activities, this information was not recorded.

Article inclusion involved a two-stage process. Firstly, all unique abstracts identified through the database searches were independently examined by two reviewers. This process was facilitated by the use of Rayyan, a web application for systematic reviews,(22) and a piloted inclusion/exclusion form (Table 2) to ensure decision standardisation. Two reviewers then independently examined the full text of potentially eligible studies for inclusion. Where a decision could not be made from the title or abstract alone, the articles full text was retrieved. If a disagreement arose, the article would have been discussed with a third reviewer until consensus was achieved although this was not required.

Duplicate studies were removed electronically by EndNote and Rayyan, and manually checked by a research team member.

[Table 2 here]

Data extraction

Data extraction was conducted independently by two reviewers using a piloted data extraction form. Extracted information included: publication date; study location, design, population and outcome measures

Data analysis

Data were analysed thematically.(23, 24) A comprehensive coding framework was developed following the analysis of two articles. The first reviewer then analysed the remaining articles to iteratively compare and identify dominant/recurring themes.

Data synthesis

Findings of the thematic analysis were synthesised using a modified narrative approach.(25) This approach seeks to synthesise the findings of included articles and the relationships between them using textual summaries.(25)

Outcome measures

Barr's (2000) adaptation of Kirkpatrick's four level evaluation model (Table 3) was used to evaluate the reported impact of patient complaints and compliments on medical performance.(26)

[Table 3 here]

Quality appraisal

Finally, all included articles were quality appraised using the Quality Assessment tool for observational cohort and cross-sectional studies.(27) Sensitivity analyses were also conducted to assess the impact, if any, on review findings following the inclusion of low quality articles.(24, 28) Such analyses have been identified as an important focus of qualitative reviews,(29) warranting its inclusion.

Results

Following the exclusion process outlined in Figure 1, six articles were included for the purposes of this review. No articles examining the impact of compliments on medical performance were identified. The results presented below therefore relate to the impact of complaints only.

Study characteristics

Included articles used an observational/cross-sectional (n=4), or descriptive comparison (n=2) design conducted in: Australia (n=3), the US (n=1), the UK (n=1) and Norway (n=1). Studied populations consisted of unspecified doctor groups/specialties (n=4) and GPs (n=2). A summary of study characteristics is provided in Table 4.

Study quality

Included articles were quality appraised as high (n=5) and acceptable (n=1) using the Quality Assessment tool for observational cohort and cross-sectional studies.(27) Sensitivity analysis identified that the inclusion of the article appraised as acceptable had no detrimental impact on the review synthesis and was therefore retained.

[Figure 1 here]

[Table 4 here]

Impact on medical performance

Of the six articles included, five identified a self-reported change in behaviour (Kirkpatrick level 3a), and one identified a change in measured performance (Kirkpatrick level 3b).(30). No included articles identified a change in the health and wellbeing of patients (Kirkpatrick level 4). Identified areas of impact are discussed in turn below.

Positive impacts on medical performance

Improved patient relations

Four included articles described a positive impact of complaints on medical performance. (5, 8, 30, 31) Identified improvements included: providing more patient information; an overall reduction in complaints; enhanced communication of risk; and relating empathetically to patients. (5, 8, 30, 31) For example, in a study of 2999 Australian doctors, 66% of surveyed doctors agreed that a complaint led them to provide communication of risk more than usual. (8) 26% (n=730) of this same population also agreed that a complaint had caused them to relate more empathetically to patients than before. (8)

More thorough documentation

A further impact identified was an improvement in documentation practice. (5) Sixty-two percent of 1279 surveyed Norwegian doctors reported that they had become more thorough with their documentation as a result of a complaint process. (5)

Increased referral, prescribing and testing rates

The final area of improvement identified involved specialist referrals, test ordering and prescription rates. Half (n=3) of the included articles identified a self-reported change in the number of specialist referrals, prescriptions rates and tests requested following a complaint. (5, 8, 31) For example, of the 549 Australian GPs surveyed, 73% reported a change in the number of tests ordered. (31) The directionality of this change i.e. more or less was not provided. 66% of the same population also referred the patient to a specialist more than usual as a consequence of a complaint. (31)

However, impacts identified as potentially positive, could simultaneously be unintended consequences of complaint procedures resulting in detrimental behaviours. The possibility of this is discussed below.

Negative impacts on medical performance

Break down in patient relations

In opposition to the positive impacts identified above, two included articles discussed a break down in patient relations as a result of complaint concerns. (5, 8) In one study, 37% (n=1029) of surveyed doctors considered every patient to be a possible complainant due to concerns about medicolegal negligence claims and complaints. (8) In some instances this led to a loss of trust in patients and their next of kin. (5)

Defensive practice

Directly linked to medical performance is the reported increase in defensive practice or practice avoidance following the receipt of a complaint. (5, 8, 18, 31) Defensive practice, defined as practice governed by the fear of medicolegal actions rather than sound judgement, (31) was discussed by four included articles. (5, 8, 18, 31) In one study of 7926 UK doctors, 84.1% (n=6665) of doctors displayed hedging behaviour i.e. being overcautious, while 45.6% (n=3612) displayed avoidance behaviours, e.g. avoiding invasive or high risk procedures/cases. (18) Similar levels of change were also reported by other included articles. (8, 31) One study reported the results of a survey of doctors in Norway, in which 27% of doctors had been the subject of a complaint reported to the Norwegian Board of Health Supervision. Despite 79% of these complaints being rejected by the Board, 25% of these doctors stated that the

complaint had made them a more “fearful doctor.” Twelve percent of doctors also reported that a complaint submission had made it more difficult to work as a doctor.(5)

Influence on career choice

Career choice was affected by complaint concerns.(8, 31) Nash et al., described how, due to concerns about receiving complaints or being referred to a regulatory body, respondents considered: retiring early (40%, n=1169), giving up medicine (33%, n=957), reducing their working hours (32%, n=929) and changing specialty (11%, n=320).(8) High levels of agreement (48%) for considering early retirement were also reported in another included article.(31)

Physical and mental wellbeing

Finally, the prospect of facing a complaint caused significant distress affecting the physical and mental wellbeing of doctors involved.(5, 17, 18) Issues identified relating to the mental wellbeing of doctors included: higher psychiatric morbidity rates; increased levels of disability in work, social or family life; enhanced anxiety; greater social dysfunction; depression and self-harm or suicidal ideation.(17, 18) In one study, 16.9% of doctors with recent or ongoing complaints reported clinically significant symptoms of moderate-severe depression.(18)

Issues relating to the physical wellbeing of doctors included: gastrointestinal or cardiovascular problems, insomnia and frequent headaches.(18) Such issues often resulted in time off work. For example, 27% of respondents spent more than a month off work following a complaint.(18)

Factors influencing change in medical performance following a complaint

The impact of a complaint on medical performance appears to be influenced by a number of factors including those related to personal, procedural, and cultural processes. Each factor identified is discussed in turn below.

Personal

The impact of a complaint on medical performance appears dependent on gender. When no complaint had been experienced, men were less likely to become depressed than women (OR = 0.76, 95% CI 0.54-1.09). However, a recent or current complaint appeared to have a higher impact on men than women in terms of depression scores (OR women = 1.72, 95% CI 1.28-2.30; OR men = 2.86, 95% CI 2.04-4.01).(18)

Doctors who had already experienced a recent, or ongoing complaint were also significantly more likely to report a change in medical practice.(8, 17, 18) For example, Bourne et al., who sought to investigate the impact of complaints on the psychological welfare and health of 7926 doctors, reported that doctors with recent or ongoing experiences of complaints were at increased risk of depression compared to those with a past complaint or no experience. This remained true when controlling for the effects of gender, age, specialty, presence of a relationship and British citizenship.(18) Doctors with ongoing or recent complaints were twice as likely to report having thoughts of self-harm and clinically significant levels of anxiety.(18) Doctors in this category were also 3.78 times more likely to report the presence of suicidal thoughts and higher levels of physical health problems, mirroring previous concerns.(18)

Complaint procedures

The management of complaints can also influence its impact. Bourne et al. conclude that the level of psychological distress experienced by a doctor is related to the type of complaint procedure encountered.(18) They conclude that doctors going through a General Medical Council “referral process” reported the highest levels of depression, anxiety and self-harm thoughts in comparison to those experiencing other formal or informal complaint procedures.(18)

The source of a complaint also influences change in medical performance.(18) Being overcautious i.e. hedging, or avoidance behaviour, increases when the complaint comes from a patient or anonymous source.(18) The severity of hedging and avoidance behaviour also increases with the length of time a complaint takes to investigate.(18) Similarly, behaviour change appears dependent on the complaint outcome. Bourne et al., report that avoidance and hedging behaviours increased when a complaint led to imposed retraining. Hedging behaviours decreased when a doctor was suspended from practice, demonstrating a clear impact on medical performance.(18)

Cultural

Finally, as identified by Levin et al. the culture in which a complaint process operates is imperative for beneficial change.(30) The authors identified a number of challenges to beneficial outcomes following a complaint, including a lack of initial leadership support; lack of staff, physician and management education; and ineffective processes for providing regular feedback about complaints and resolution timeframes.(30) The encouragement of leadership buy-in, enhanced transparency, managerial competence and staff education, were identified as possible improvements to complaint handling and subsequent impacts.(18, 30)

Discussion

This review contributes to the emerging field of person centred healthcare by exploring the impact of complaints and compliments on the medical performance of individual doctors. Although no articles that examined the impact of compliments on medical performance were identified, six articles identified a measured, or self-reported change, in medical performance following a complaint. No articles identified reported a change in the health and wellbeing of patients.

Potentially beneficial impacts of complaint procedures included improved patient relations, more thorough documentation, and increased referral, prescribing or testing requests. However, these outcomes must be interpreted with caution as such changes may be the result of defensive practice or avoidance behaviour, and therefore may negatively impact on overall patient care.

Other negative consequences identified included the physical and psychological distress associated with complaint processes, even when rejected at an early stage.(18) For example, the consideration of early retirement by nearly half of studied populations may be an unintentional and detrimental consequence of ineffective complaint procedures. This catalytic effect may contribute to future workforce issues at a time when some specialties face national shortages.(32) While these issues are not directly related to medical performance, the overall impact on patient care may be substantial.

Similar to other quality improvement activities,(33) a number of factors, categorised as personal, procedural or cultural by the authors appear to influence the impact of complaints on medical performance, challenging the assumption held by some that complaints typically lead to a beneficial impact on medical performance, and thus in turn, patient safety and quality of care.

Implications

The implications of this review for person-centred healthcare are clear. Firstly, while recognising a positive trend,(5) there is an evident need to change the existing culture that surrounds patient complaints and compliments. While there is no formally recognised, or agreed way of providing compliments, there are formally recognised ways of providing a complaint that are often actively encouraged and promoted. This inspires a culture of negativity and punitive action, whether intentional or not. Complaints are also often seen as indicative of individual failings or character flaws.(6, 17) Doctors are arguably socialised to strive for error-free practice.(5, 6) When this societal ideal is challenged, feelings of guilt, shame and depression can ensue. If such detrimental impacts are to be diminished, it is imperative that complaints are able to be discussed in a supportive, open and transparent manner.(5) Such a supportive environment has been shown to be crucial in inducing positive change in other sensitive areas of practice improvement, such as significant events.(34) When viewed in the context of regulatory processes, the potential for appraisal to partially fulfil this supportive and developmental function should be acknowledged, provided the appraiser is effectively skilled in facilitating formative and supportive discussions.(35)

Secondly, the importance of improving patient and staff education regarding complaint and compliment processes should not be underestimated. As identified in this review, up to three quarters of complaints are rejected when submitted.(5) However, as demonstrated by Forde & Aasland, receiving a complaint during this triage stage can still lead to detrimental impacts regardless of its outcome. In many cases, critical feedback that does not indicate a malpractice risk is submitted to regulatory bodies such as the General Medical Council where it is later rejected due to the complaint not meeting relevant thresholds for action.(36) This is likely to lead to dissatisfaction and frustration among both patients and doctors.

Finally, while acknowledging the complexity of complaint systems is not a new issue,(10, 36) existing complaint systems remain complex and difficult to navigate for those unfamiliar with medical jargon, systems and processes. It is imperative that complaint handling systems are efficient and easy to use for both doctors and patients as historical incidents of deficient complaint processes have arguably led to missed opportunities in detecting systemic issues, opportunities for quality improvement and change.(2) The value of a systemised process that aligns local, regional and national data for the use of individual and group learning should not be underestimated.(30)

Strengths and weaknesses

While applying a rigorous review process to address a previously unexplored area, the limitations of this research must be acknowledged. Included articles primarily relied on self-reported data, a risk of social desirability is therefore acknowledged. Two of the included articles also relied on the same sample population. Publication bias is also therefore a possibility. Finally, this research draws on a small number of

peer-reviewed publications, although some articles draw on large sample sizes indicating a need for more primary research into this area.

Conclusion

In conclusion, patient complaints can have an impact on medical performance. Currently, the desired purpose of complaints as a learning tool may be undermined by personal, procedural and cultural factors. Efforts should be made to address the fear and stigmatisation of complaints currently experienced with a renewed focus on supporting the submission and recognition of compliments also required. Further work needs to be done to ensure complaints are seen as a valuable learning, not punitive resource. Review findings are likely to have implications for educators, regulators and those responsible for supporting doctors and patients through complaint, and compliment procedures.

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Tables

Table 1 Systematic review search strategy

Search strategy
Setting: "physician" OR "doctor" OR "surgeon" OR "clinician" OR "consultant" AND Intervention: "patient complaint*" OR "patient grievance*" OR "compliment*" OR "positive feedback" AND

Outcome: "professional development" OR change OR improve OR quality OR learning OR reflect OR impact OR outcome OR safety OR competence OR effective OR performance OR attitude

Table 2 Study inclusion criteria form

Inclusion criteria form	
1. Is the article available in English?	
Yes (proceed)	No (reject)
2. Is the article published between 2007 and 2017?	
Yes (proceed)	No (reject)
3. Does the article talk about the impact of patient complaints and/or compliments on medical performance?	
Yes (proceed)	No (reject)
4. Is the article a commentary, opinion piece, editorial, or letter?	
Yes (reject)	No(proceed)
5. Does the article discuss the impact of patient complaints and/or compliments on the performance of qualified doctors?	
Yes (include)	No (exclude)

Table 3: Barr's (2000) adaptation of Kirkpatrick's four level evaluation model

Level	Description
Level 1: learners' reaction	Relate to participants views of their learning experience programme
Level 2: learning outcomes	
2a: modification of attitudes/perception	Changes in reciprocal attitudes or perceptions between participant groups, towards patients/clients and their condition, circumstances, care and treatment.
2b: Acquisition of knowledge/skills	Acquisition of concepts, procedures and principles of inter-professional collaboration or the acquisition of thinking/problem-solving, psychomotor and social skills linked to collaboration
Level 3: Change in behaviour	
3a: Self-reported change in behaviour Level	Behavioural change transferred from the learning environment to the workplace prompted by modifications in attitudes or perceptions, or the application of newly acquired knowledge/skills in practice.
3b: Measured change in performance	Overeem et al. (2010) identify that this level can be further separated into:

Level 4: Patient/Organisational outcomes

4a: Change in organisational practice	This relates to wider changes in the organisation/delivery of care, attributable to an education programme.
4b: Benefits to patients/clients	Covers any improvements in the health and well-being of patients/clients as a direct result of an education programme.

Table 4 Study characteristics of included articles

Author	Publication date	Study location	Study population and sample methodology	Study design	Barr's (2000) Kirkpatrick evaluation level	Quality appraisal value
Nash et al.,(17)	2007	Australia	Purposeful volunteer sample of 566 GPs	Descriptive comparison	3a	++
Nash et al.,(31)	2009	Australia	Purposeful volunteer sample of 566 GPs	Descriptive comparison	3a	++
Nash et al.,(8)	2010	Australia	Volunteer sample of 2999 specialists	Cross-sectional	3a	++
Levin et al.,(30)	2014	USA	Not specified	Cross-sectional	3b	+
Bourne et al.,(18)	2015	UK	Volunteer sample of 7926 doctors	Cross-sectional	3a	++
Forde & Aasland.,(5)	2017	Norway	Volunteer sample of 1279 doctors	Cross-sectional	3a	++

++ High quality

+ Acceptable quality

Figures

Figure 1 PRISMA flow diagram

